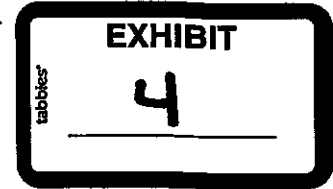


**Tom Irmiter**

UNITED STATES DISTRICT COURT FOR THE  
WESTERN DISTRICT OF OKLAHOMA

1) EL NACIONAL DE OKLAHOMA, INC., )  
 )  
 Plaintiff, )  
 )  
 v. )  
 )  
 1) TRAVELERS CASUALTY INSURANCE )  
 COMPANY OF AMERICA, )  
 )  
 Defendant. )  
 )  
 \_\_\_\_\_ )



Case No. CIV-14-728-D

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ORAL DEPOSITION OF

TOM IRMITER

January 20, 2016  
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ORAL DEPOSITION OF TOM IRMITER, produced as a witness at the instance of the Defendant, and duly sworn, was taken in the above-styled and numbered cause on January 20, 2016, from 9:34 a.m. to 3:51 p.m., before TAMI A. ADAMS, CSR in and for the State of Texas, reported by machine shorthand, at the offices of The Voss Law Firm, P.C., 26619 Interstate 45 South, The Woodlands, Texas, pursuant to the Federal Rules of Civil Procedure and the provisions stated on the record herein or attached hereto.

## Tom Irmeter

<p style="text-align: right;">110</p> <p>1 MR. McCLENNY: Objection. Form.</p> <p>2 A. <b>Not that I'm aware of as we sit here today.</b></p> <p>3 Q. (BY MR. PFANSTIEL) All right. So --</p> <p>4 (Brief interruption at the door)</p> <p>5 MR. PFANSTIEL: Are those the -- Is that</p> <p>6 the CV?</p> <p>7 MR. McCLENNY: That you asked for an</p> <p>8 amended copy. And it is 16, 17 -- Yeah. (Handing</p> <p>9 document.)</p> <p>10 MR. PFANSTIEL: We are replacing</p> <p>11 Exhibit 11 with a -- with a new exhibit we just</p> <p>12 received, which is the updated --</p> <p>13 MR. McCLENNY: You can set --</p> <p>14 MR. PFANSTIEL: -- complete CV.</p> <p>15 MR. McCLENNY: You can set it to the side.</p> <p>16 THE WITNESS: Yeah.</p> <p>17 MR. McCLENNY: Put it in later.</p> <p>18 A. <b>What section was that; do you remember?</b></p> <p>19 Q. (BY MR. PFANSTIEL) Eleven.</p> <p>20 A. <b>Oh, 11. Here we go. So you want to have her</b></p> <p>21 <b>make a new stamp --</b></p> <p>22 Q. Yeah, let's do that.</p> <p>23 A. <b>-- and just get it done now? Otherwise, we'll</b></p> <p>24 <b>forget.</b></p> <p>25 (Exhibit 11 re-marked, and brief</p>	<p style="text-align: right;">112</p> <p>1 A. <b>Yes.</b></p> <p>2 Q. Is it common for you to inspect a property that</p> <p>3 long after a loss?</p> <p>4 A. <b>Yes. We've inspected them up to six years</b></p> <p>5 <b>later.</b></p> <p>6 Q. Would you agree with me that the closer in time</p> <p>7 to a loss that you inspect a property, the -- the better</p> <p>8 you're able to do as far as --</p> <p>9 MR. McCLENNY: Objection. Form. Sorry.</p> <p>10 Q. (BY MR. PFANSTIEL) -- forming opinions as to</p> <p>11 damage and cause of loss?</p> <p>12 MR. McCLENNY: Same objection.</p> <p>13 A. <b>Closer is better, but it's not always</b></p> <p>14 <b>necessary.</b></p> <p>15 Q. (BY MR. PFANSTIEL) All things being equal,</p> <p>16 would you say it's better to inspect a property closer</p> <p>17 to the date of loss or farther away from the date of</p> <p>18 loss?</p> <p>19 MR. McCLENNY: Same objection.</p> <p>20 A. <b>You know, I -- we don't ever get to inspect</b></p> <p>21 <b>them close to the date of loss, so ...</b></p> <p>22 Q. (BY MR. PFANSTIEL) Well --</p> <p>23 A. <b>I mean, seriously, the closest that I have</b></p> <p>24 <b>inspected a property in the last five years to the date</b></p> <p>25 <b>of loss is probably some of the Joplin tornados, and</b></p>
<p style="text-align: right;">111</p> <p>1 discussion off the record)</p> <p>2 Q. (BY MR. PFANSTIEL) All right. So,</p> <p>3 Mr. Irmeter, what was your project on this case?</p> <p>4 A. <b>What was the scope of the project?</b></p> <p>5 Q. Yes, sir.</p> <p>6 A. <b>To determine whether or not the property was</b></p> <p>7 <b>damaged by a storm event on or around May 31st, 2013, to</b></p> <p>8 <b>determine what the extent of that damage was, and to</b></p> <p>9 <b>determine the scope of repair.</b></p> <p>10 Q. When were you hired?</p> <p>11 A. <b>Shortly before the inspection. I believe we</b></p> <p>12 <b>covered our retainer agreement, and it would have been</b></p> <p>13 <b>shortly after that was executed. And that document was</b></p> <p>14 <b>executed on 7-2, 2015, and --</b></p> <p>15 MR. McCLENNY: That's Exhibit 6.</p> <p>16 A. <b>-- my inspection occurred on June 8th, 2015.</b></p> <p>17 <b>So I inspected it on June 8th, and that's,</b></p> <p>18 <b>approximately, when we were retained. We sent out an</b></p> <p>19 <b>agreement on the 2nd. They got back to us after the</b></p> <p>20 <b>inspection.</b></p> <p>21 Q. (BY MR. PFANSTIEL) Okay.</p> <p>22 A. <b>Yeah.</b></p> <p>23 Q. Fair to say that you've inspected the property</p> <p>24 two years -- over two years after the alleged date of</p> <p>25 loss?</p>	<p style="text-align: right;">113</p> <p>1 <b>even that was six months after the tornados. So a lot</b></p> <p>2 <b>of times, we are brought in a year to 18 months after</b></p> <p>3 <b>the event.</b></p> <p>4 Q. I understand that.</p> <p>5 A. <b>Yeah.</b></p> <p>6 Q. What I -- My question's a little different.</p> <p>7 It's -- Wouldn't you find it more advantageous, from an</p> <p>8 inspection standpoint, to actually inspect the property</p> <p>9 closer to the date of loss --</p> <p>10 MR. McCLENNY: Objection. Form.</p> <p>11 Q. (BY MR. PFANSTIEL) -- than farther away?</p> <p>12 A. <b>Actually, in a lot of cases, no. It benefits</b></p> <p>13 <b>us. When you have -- particularly on low-sloped roofs.</b></p> <p>14 <b>Because -- Well, even on shingled roofs. Sometimes, the</b></p> <p>15 <b>failure mechanism that occurs is latent. The roof can</b></p> <p>16 <b>be leaking after the event; but because of the way that</b></p> <p>17 <b>the roof deck is constructed, the thickness of the roof-</b></p> <p>18 <b>deck insulation, you may not discover the leaking</b></p> <p>19 <b>activities, or the intensity of the leaking, sometimes</b></p> <p>20 <b>until six months, eight months, a year later.</b></p> <p>21 <b>What's important in that situation is to</b></p> <p>22 <b>interview the stakeholders. And that's covered in the</b></p> <p>23 <b>ASTM document that we discussed earlier. That's one of</b></p> <p>24 <b>the keys to that document, is you need to get service</b></p> <p>25 <b>history on the building, which I did. I met both with</b></p>

29 (Pages 110 to 113)

## Tom Irmiter

<p style="text-align: right;">114</p> <p>1 the building owner and I believe his sister and had a</p> <p>2 lengthy discussion when I first got there.</p> <p>3 We walked around the building. I'm</p> <p>4 looking -- Right as I come in the door, on the right</p> <p>5 side, you can -- And I have pictures of this -- you can</p> <p>6 see water damage. You can see water damage on the</p> <p>7 ceiling. My first question is, "Tell me about this.</p> <p>8 When did this occur? Has this been ongoing?" You know.</p> <p>9 Q. Well --</p> <p>10 A. Those kinds of things are very important to</p> <p>11 establish a timeline.</p> <p>12 Q. Okay. So is it your testimony today --</p> <p>13 A. (Nodding head.)</p> <p>14 Q. -- that you would prefer to inspect a property</p> <p>15 two years after the loss or closer in time to the loss?</p> <p>16 MR. McCLENNY: Objection. Form.</p> <p>17 A. Doesn't make a difference.</p> <p>18 Q. (BY MR. PFANSTIEL) Doesn't make a</p> <p>19 difference --</p> <p>20 A. Does not make a difference. No.</p> <p>21 Q. So there is no advantage, in your opinion, to</p> <p>22 inspecting a loss close -- right after it happens as</p> <p>23 opposed to two years later.</p> <p>24 A. No. I don't believe there is. And, in fact,</p> <p>25 there are some advantages to inspecting it later than</p>	<p style="text-align: right;">116</p> <p>1 the storm, which are the entrance point for water, are</p> <p>2 not co-located to the exit point. You can have the</p> <p>3 entrance point here, and you can have the exit point 30</p> <p>4 feet away on the inside, depending on the roof deck, the</p> <p>5 roof slope, openings in the roof deck, which when I was</p> <p>6 able to, I was able to photograph, you know, different</p> <p>7 cuts and openings and things in that -- in that slab.</p> <p>8 And so it made very clear sense as to why the leaking</p> <p>9 was occurring the way it was and how it was finding its</p> <p>10 way into the building.</p> <p>11 That wouldn't show necessarily as</p> <p>12 completely on the day of the storm. That doesn't mean</p> <p>13 that the water wasn't there on top of that concrete</p> <p>14 deck. And so the scope of repair might, in fact, be</p> <p>15 diminished incorrectly if you're diagnosing too quickly.</p> <p>16 Q. Okay. So --</p> <p>17 A. Yeah.</p> <p>18 Q. So if I'm understanding you correctly, it's --</p> <p>19 you're in a better position to judge the scope of damage</p> <p>20 and the cause of damage out two years than -- than, say,</p> <p>21 Mr. Watson was, closer in time to the loss.</p> <p>22 MR. McCLENNY: Objection. Form.</p> <p>23 A. Yeah. There's -- I -- Yeah, I believe so. I</p> <p>24 guess I would liken it to kind of like a whiplash.</p> <p>25 Whiplash, you know, sometimes doesn't evidence itself</p>
<p style="text-align: right;">115</p> <p>1 sooner.</p> <p>2 Q. Okay.</p> <p>3 A. As I discussed.</p> <p>4 Q. Okay.</p> <p>5 A. Yeah.</p> <p>6 Q. So, actually, it's better to inspect it later</p> <p>7 than sooner.</p> <p>8 A. In some instances, yes.</p> <p>9 Q. How about here in this case?</p> <p>10 A. I believe so. I actually believe that -- And</p> <p>11 we talk about this -- that the -- the leaking that began</p> <p>12 to occur after this event, based on information provided</p> <p>13 to us by the building owners and the building occupants,</p> <p>14 had progressed a great deal in that two-year period.</p> <p>15 That would be very consistent with a roof that has had a</p> <p>16 catastrophic failure and how that failure presents</p> <p>17 itself over a time continuum as opposed to immediately.</p> <p>18 Q. Okay.</p> <p>19 A. Yeah.</p> <p>20 Q. So what I'm hearing you say is damages can</p> <p>21 manifest themselves over time.</p> <p>22 A. Yes. They present themselves over time.</p> <p>23 The -- And the problem is, is that the --</p> <p>24 often what's misdiagnosed on low-sloped roofs after an</p> <p>25 event like this is the created openings that result from</p>	<p style="text-align: right;">117</p> <p>1 immediately in terms of the damages that you might have</p> <p>2 to your neck or your back or something like that. I</p> <p>3 know that, having been through one of those.</p> <p>4 Q. (BY MR. PFANSTIEL) Well, but the hail</p> <p>5 fractures to a roof membrane would be more evident</p> <p>6 closer in time, would they not?</p> <p>7 A. Not necessarily.</p> <p>8 Q. Does that --</p> <p>9 A. But they'll be -- they'll be no less evident</p> <p>10 two years later.</p> <p>11 Q. What if you had intervening hailstorms in the</p> <p>12 intervening two years; how does that play into it?</p> <p>13 A. We see that all the time. Absolutely.</p> <p>14 Q. What do you do to determine whether a hail</p> <p>15 strike you see occurred two years ago or from the</p> <p>16 intervening storm?</p> <p>17 A. Well, as I said before, I would have been --</p> <p>18 I -- This -- This project would have given me more</p> <p>19 concern about intervening hailstorms --</p> <p>20 Q. Uh-huh.</p> <p>21 A. -- had my questions to the building owners,</p> <p>22 when I asked them about the pattern of leaking, had they</p> <p>23 said, "Yeah, we had this event, and boy, you know what?</p> <p>24 It just started leaking three weeks before you got</p> <p>25 here." Then I would have been concerned. I would have</p>

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## Tom Irmeter

<p style="text-align: right;">118</p> <p>1 been calling this law firm, and I would -- that retained</p> <p>2 us, and I would have been saying to them, "Guys, you</p> <p>3 know, we have the wrong" -- "we have a different storm</p> <p>4 date. We have things occurring as a result of a new</p> <p>5 storm."</p> <p>6 But because I had very believable -- I</p> <p>7 don't know why they would want to lie. Didn't make</p> <p>8 sense that they would. I always trust the people I'm</p> <p>9 working with. They seem reasonable. I had very good</p> <p>10 documentation from them that this is what occurred, and</p> <p>11 it's gotten progressively worse. And so the damage had</p> <p>12 already occurred. So I, really, don't care if there's</p> <p>13 additional storm damage at that point in time.</p> <p>14 Q. Okay. So --</p> <p>15 A. Yeah.</p> <p>16 Q. -- you had talked to who?</p> <p>17 A. The -- And, again, I'm not going to have the</p> <p>18 name of the guy, but the owner. The guy who owns the</p> <p>19 newspaper.</p> <p>20 Q. Okay.</p> <p>21 A. Yeah. And his -- I talked to him. I talked to</p> <p>22 his sister, I believe.</p> <p>23 Q. And what did -- what did you -- what did he</p> <p>24 tell you?</p> <p>25 A. Well, I said, "Tell me about the" -- "Tell me</p>	<p style="text-align: right;">120</p> <p>1 there because of leaking." He said, "No. This roof</p> <p>2 wasn't leaking before the storm hit."</p> <p>3 That's pretty important information. I</p> <p>4 would have liked to have seen that in the report from</p> <p>5 the other engineers, but they didn't -- they didn't</p> <p>6 comment on any of that stuff. They just automatically</p> <p>7 assumed that the reason the white coating was on there</p> <p>8 was because the leak -- roof was previously leaking, and</p> <p>9 that's not the case.</p> <p>10 Q. Oh.</p> <p>11 A. Yeah.</p> <p>12 Q. So what did you do to confirm what -- what the</p> <p>13 building owner told you?</p> <p>14 A. Saw a couple of buckets, in the back, of the</p> <p>15 white coating, and took him at his word.</p> <p>16 Q. Did you talk to any of the tenants?</p> <p>17 A. The tenants -- I talked to the people on the</p> <p>18 right side of the building. I think it's a nonprofit --</p> <p>19 I want to say something to do with welfare or something</p> <p>20 like that -- office. I walked through there. I talked</p> <p>21 with them. They had counseling sessions going on. I</p> <p>22 said, "Can I take a look?" I said, "Are you guys having</p> <p>23 leaking?" They said, "No, not right now, we're not</p> <p>24 having any leaking."</p> <p>25 "Have you had leaking?"</p>
<p style="text-align: right;">119</p> <p>1 about" -- I said, "I'm looking at these pictures of</p> <p>2 these roofs that have been published in reports and</p> <p>3 stuff that we pulled up, and I'm looking at Google Earth</p> <p>4 and pictorial pictures; and I'm seeing this roof that's</p> <p>5 got this varying degrees of white coating on there. And</p> <p>6 so my first question to you is, 'Why are you putting the</p> <p>7 white coating on there?'"</p> <p>8 Because intuitively, what I would be</p> <p>9 thinking, based on my education and experience, is</p> <p>10 you're putting the white coating on there because it's</p> <p>11 leaking. Right?</p> <p>12 And by the way, I said, "Did anybody else</p> <p>13 interview you?" They said, "No. You're the first guy</p> <p>14 to interview me. The other engineers that were here for</p> <p>15 the insurance company didn't sit down and talk to me</p> <p>16 about this." And to me, that's essential to evaluating</p> <p>17 a claim like this in terms of causation.</p> <p>18 And he said -- I said, "So why did you put</p> <p>19 it on there?" Said, "Oh. To save energy."</p> <p>20 "So you put the white" --</p> <p>21 "Yeah. I put the white stuff on there,</p> <p>22 and we would put it on as it wore out, because of energy</p> <p>23 cost. We thought it was a way to reflect the sun and</p> <p>24 save energy."</p> <p>25 So I said, "So you weren't putting it on</p>	<p style="text-align: right;">121</p> <p>1 "Yes, we've had leaking."</p> <p>2 "Has it been going on forever?"</p> <p>3 "No. It started a few years ago."</p> <p>4 Q. Okay.</p> <p>5 A. Okay.</p> <p>6 Q. So -- But you don't remember who this was that</p> <p>7 you talked to?</p> <p>8 A. No. You can -- It's a -- It's a health service</p> <p>9 that's part of the building.</p> <p>10 Then there's a middle part of the building</p> <p>11 that I couldn't get access to. It was closed that day.</p> <p>12 Q. So did -- Okay. So -- Do you have notes of who</p> <p>13 you talked to?</p> <p>14 A. If I have them, I would have produced them to</p> <p>15 you.</p> <p>16 Q. Okay.</p> <p>17 A. Yeah.</p> <p>18 Q. So I'll -- I'll represent to you that you</p> <p>19 didn't produce any notes.</p> <p>20 A. Yeah. Typically, any field notes are forwarded</p> <p>21 into. So I would have taken field notes, for example,</p> <p>22 for Section 2.3, which are the roof cores, the actual</p> <p>23 measurements in the roof cores; and those would have</p> <p>24 been in my logbook. I would have taken field notes</p> <p>25 about ceiling stains, and I would have taken</p>

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## Tom Irmiter

<p style="text-align: right;">126</p> <p>1 leaking?</p> <p>2 Q. (BY MR. PFANSTIEL) Right.</p> <p>3 A. What compromised it?</p> <p>4 Q. So --</p> <p>5 A. That's, really, the big question.</p> <p>6 Q. Okay. So what --</p> <p>7 A. Yeah.</p> <p>8 Q. -- what I -- Okay. So you believe the roof</p> <p>9 began leaking after the storm, because that's what the</p> <p>10 owner told you.</p> <p>11 A. Yes.</p> <p>12 Q. What did you do to determine the cause of the</p> <p>13 leak?</p> <p>14 A. Well, first of all, what I did is, I inspected</p> <p>15 the interior of the building and documented water-</p> <p>16 infiltration areas that were visible to the naked eye</p> <p>17 and the camera.</p> <p>18 I then, on two different occasions, used</p> <p>19 an infrared camera to look for anomalies in those</p> <p>20 locations, and took documentations of anomalies.</p> <p>21 I then got up on the roof, and I walked</p> <p>22 the entire roof two different days in, essentially, two-</p> <p>23 foot increments, from left to right on the first day and</p> <p>24 from back to front on the second day. So I'm -- I'm</p> <p>25 really getting a chance to look at this roof completely.</p>	<p style="text-align: right;">128</p> <p>1 determine that was from the 2013 storm and not the 2015</p> <p>2 storm?</p> <p>3 A. The -- I couldn't necessarily determine that,</p> <p>4 at that point in time.</p> <p>5 Q. Were you able --</p> <p>6 A. Yeah.</p> <p>7 Q. Were you able to later determine that?</p> <p>8 A. No. No. That would be difficult. I mean, it</p> <p>9 certainly was in that spot of those two. It certainly</p> <p>10 wasn't from a 2'7, 2'08, something like that, event.</p> <p>11 The -- The exposed surfaces were fairly</p> <p>12 clean. I mean, they weren't aged. They weren't</p> <p>13 polluted. They looked fairly clean.</p> <p>14 Q. So that would --</p> <p>15 A. So --</p> <p>16 Q. -- indicate a new --</p> <p>17 A. Something within a couple of years, yeah.</p> <p>18 Q. Okay. So -- So -- And you -- you went and</p> <p>19 looked for hail marks on -- on the roof membrane itself?</p> <p>20 A. Yeah. And particularly in the areas that had</p> <p>21 been coated, I was looking for what we call hail shocks.</p> <p>22 And that leaves a -- Where it hits, it kind of leaves a</p> <p>23 nice, you know, circle, circle, circle, kind of shock</p> <p>24 mark. And I found, you know, some of those.</p> <p>25 I looked at delamination of the surface,</p>
<p style="text-align: right;">127</p> <p>1 I spent time using an infrared camera and a</p> <p>2 Tramex meter to triangulate potential water that was in</p> <p>3 the roof system itself.</p> <p>4 I performed some core cuts to determine</p> <p>5 how many layers of roof were on there and to determine</p> <p>6 the -- if it was wet, if, in fact, the triangulation was</p> <p>7 correct.</p> <p>8 And then I spent time both days looking</p> <p>9 for physical damage to air-conditioning units, soft</p> <p>10 metals, parapet wall caps. There's two types. One,</p> <p>11 there's a metal cap; and there's a clay tile cap.</p> <p>12 And then I spent time physically on my</p> <p>13 hands and knees for a couple of hours very closely</p> <p>14 looking at and tactilely feeling for impact damage</p> <p>15 typically caused by hail.</p> <p>16 Q. Okay.</p> <p>17 A. It was fairly thorough, I think, investigation.</p> <p>18 Q. Sure.</p> <p>19 A. Yeah.</p> <p>20 Q. So what -- when you say you're inspecting</p> <p>21 the -- the soft metals, you found some hail?</p> <p>22 A. Yes.</p> <p>23 Q. You found a hail hit to the clay tile?</p> <p>24 A. I think about eight or ten, yeah.</p> <p>25 Q. How -- How -- How would you -- How could you</p>	<p style="text-align: right;">129</p> <p>1 where it chipped off parts of the surface.</p> <p>2 It's interesting now because what you have</p> <p>3 shared with me today sheds some light on part of my</p> <p>4 investigation. Because based on the age of the</p> <p>5 building, when we pulled up the County records, I</p> <p>6 anticipated seeing multiple layers of roofing on here.</p> <p>7 And, I mean, it was, you know, one layer. So that now</p> <p>8 makes sense as to why I wasn't seeing multiple layers,</p> <p>9 since the roof had been redone in '07.</p> <p>10 Q. So --</p> <p>11 A. Yeah.</p> <p>12 Q. -- when you say single layer, is that -- is</p> <p>13 that like a one ply, or how -- how do you --</p> <p>14 A. Well, it's a built-up roof. But on buildings</p> <p>15 of this age, we typically see the first roof. Then we</p> <p>16 see some scarification. We might see another one.</p> <p>17 We cut one in Dallas yesterday. My guys</p> <p>18 told me they had five different layers of roofing on</p> <p>19 there that was about nine inches thick.</p> <p>20 You know, this was a nice, you know, inch</p> <p>21 and a half, indicating that it's -- it's a single</p> <p>22 application at this point.</p> <p>23 And so what I found interesting in reading</p> <p>24 the Vertex report when I saw that -- And this now starts</p> <p>25 to make sense -- is that I expected the condition of</p>

33 (Pages 126 to 129)

## Tom Irmiter

<p style="text-align: right;">170</p> <p>1 A. Yes, I do. Absolutely.</p> <p>2 Q. Okay.</p> <p>3 A. Yeah. Oh, absolutely.</p> <p>4 Q. Why is that?</p> <p>5 A. Well, there's -- there's water damage. I mean,</p> <p>6 the roof is leaking. It's clearly --</p> <p>7 And -- And again, I'm not a -- I have not</p> <p>8 been asked as a -- to be a policy expert on this. Okay?</p> <p>9 But I'm familiar enough with insurance policies to know</p> <p>10 that one of the covered losses is water damage that</p> <p>11 occurs on the interior.</p> <p>12 So if I was given that assignment by the</p> <p>13 insurance company, I would certainly want to not only</p> <p>14 eliminate the possibility of hail, but I'd also want to</p> <p>15 eliminate, why is the water getting in? Because there</p> <p>16 may be an underlying claim for the interior repair work.</p> <p>17 We have lots of claims over the years</p> <p>18 where a roof isn't paid for, but the ensuing loss on the</p> <p>19 inside is. And so I don't know what his assignment was.</p> <p>20 We don't look at policies. We're not</p> <p>21 hired to evaluate policies. We don't go with that in</p> <p>22 mind. But again, I don't know what his assignment was.</p> <p>23 Q. Okay.</p> <p>24 A. But typically, you would want -- I certainly,</p> <p>25 and as a firm, we certainly want to figure all that out</p>	<p style="text-align: right;">172</p> <p>1 on a roof that was in 2007, no.</p> <p>2 Q. Have you ever seen a six-year-old roof with</p> <p>3 this kind of alligator cracking on it?</p> <p>4 A. All the time, yeah.</p> <p>5 Q. Is that primarily because they don't provide UV</p> <p>6 protection on them?</p> <p>7 A. Correct.</p> <p>8 Q. So they -- you should either put some kind of</p> <p>9 elastomeric coating or a ballast or something on it?</p> <p>10 MR. McCLENNY: Objection. Form.</p> <p>11 A. You -- You can. It's -- Depends on the -- the</p> <p>12 installer. It depends on the products they're using.</p> <p>13 Q. (BY MR. PFANSTIEL) Okay.</p> <p>14 A. Is this the first UV -- or is this the first</p> <p>15 uncoated built-up roof that I've seen alligator? No.</p> <p>16 I've seen alligatoring on every built-up roof I've ever</p> <p>17 looked at.</p> <p>18 Q. Okay.</p> <p>19 A. That's a pretty common phenomena.</p> <p>20 Q. That does not have the UV coating on it.</p> <p>21 A. I've seen it with UV coating --</p> <p>22 Q. Okay.</p> <p>23 A. -- as well. Absolutely.</p> <p>24 Q. Oh. And earlier, you had mentioned something</p> <p>25 to the effect of when you heard that he had put</p>
<p style="text-align: right;">171</p> <p>1 before we leave the site.</p> <p>2 Q. Okay.</p> <p>3 A. Yeah. Let's see. These are all core pictures</p> <p>4 that go all the way to page 93. Yeah. And I think</p> <p>5 that's it, that I have. Yeah.</p> <p>6 Q. Okay. And --</p> <p>7 A. Oh, I -- the -- I'd like to comment on page --</p> <p>8 on Figures 111 through --</p> <p>9 Q. Well, before we go there --</p> <p>10 A. Okay.</p> <p>11 Q. -- real quick, 107, is that a hail bruise?</p> <p>12 What is that?</p> <p>13 A. Yes. It's a hail shock.</p> <p>14 Q. Hail shock.</p> <p>15 A. Right in the center of it.</p> <p>16 Q. Okay. And then 108?</p> <p>17 A. Displaced material caused by hail, in my</p> <p>18 opinion.</p> <p>19 Q. Okay. But you -- you'd agree with me that when</p> <p>20 a flood coat like this alligator cracks, it becomes</p> <p>21 brittle. Right?</p> <p>22 A. Oh, yeah.</p> <p>23 Q. Can -- Can that material be displaced by a</p> <p>24 flood trap?</p> <p>25 A. On a roof that's about 30 years old, yeah; but</p>	<p style="text-align: right;">173</p> <p>1 elastomeric coating on this roof, that you'd expected</p> <p>2 that was because it was leaking; and you were surprised</p> <p>3 when he told you it was to reflect the sun away?</p> <p>4 A. Yes.</p> <p>5 MR. McCLENNY: Objection.</p> <p>6 A. For U--</p> <p>7 MR. McCLENNY: Form.</p> <p>8 A. For UV and for energy -- energy reasons --</p> <p>9 Q. (BY MR. PFANSTIEL) Okay.</p> <p>10 A. -- is what he was indicating.</p> <p>11 Q. Does that indicate -- Is it common -- In your</p> <p>12 experience and over the years you've been doing this, is</p> <p>13 it common for alligator cracking to cause leaks?</p> <p>14 A. No. Historically, we don't see that. Again,</p> <p>15 the reason we don't is because we would see catastrophic</p> <p>16 failure if that were the case.</p> <p>17 I mean, there's millions of inches of</p> <p>18 cracks on this roof from alligatoring. Yeah.</p> <p>19 Q. Right.</p> <p>20 A. So --</p> <p>21 Q. Well, maybe not all of the millions of inches</p> <p>22 are leaking yet.</p> <p>23 A. Maybe, they're not. But I certainly feel like</p> <p>24 the correlations that I was able to meet -- make between</p> <p>25 impact locations and section loss of material and</p>

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<p style="text-align: right;">174</p> <p>1 downward slope leaking seems reasonable.</p> <p>2 Q. Okay.</p> <p>3 A. Yeah.</p> <p>4 Q. Well, you -- you found downward slope leaking</p> <p>5 in how many locations?</p> <p>6 A. Not all over. Yeah. Didn't find it all over.</p> <p>7 Q. No. In how many?</p> <p>8 A. Oh, I'd have to look back on the infrareds</p> <p>9 and --</p> <p>10 Q. Oh, from --</p> <p>11 A. Yeah.</p> <p>12 Q. -- the infrared.</p> <p>13 A. Yeah, from the infrared.</p> <p>14 Q. So was infrared, is that a -- is that a</p> <p>15 reliable way to check moisture levels?</p> <p>16 A. Depends on your training.</p> <p>17 Q. Okay. In your training, is it reliable?</p> <p>18 A. Well, I was trained by the U.S. Department of</p> <p>19 Energy, back in 1984, to use infrared. Feel like it's</p> <p>20 very -- Yeah, I --</p> <p>21 Q. Okay. It's reliable in your hands.</p> <p>22 A. Yes, absolutely. I've actually been --</p> <p>23 Q. Okay. Because --</p> <p>24 A. Yeah.</p> <p>25 Q. The reason I'm asking --</p>	<p style="text-align: right;">176</p> <p>1 see in that wall? This is an interior wall.</p> <p>2 Q. Uh-huh.</p> <p>3 A. I should see nothing in that wall. I should</p> <p>4 see a nice clean orange screen on that wall.</p> <p>5 The wall behind you, I'll probably see</p> <p>6 some purples and some oranges; and below the window, if</p> <p>7 it's leaking, I'll probably see a plume, indicating</p> <p>8 potential -- an anomaly consistent with water intrusion.</p> <p>9 That's the first step.</p> <p>10 Q. Was infrared -- it's measuring heat. Right?</p> <p>11 A. Measuring heat. Absolutely.</p> <p>12 Q. So it's not measuring water. It's measuring</p> <p>13 heat.</p> <p>14 A. Measuring heat. So --</p> <p>15 Q. So how did you -- But you just said -- I may</p> <p>16 have misunderstood you. But we were -- I asked you</p> <p>17 about you had checked, you know, downward wetness.</p> <p>18 A. Yeah.</p> <p>19 Q. And you said you checked it with infrared.</p> <p>20 A. Yeah.</p> <p>21 Q. And that indicated to you that it was wet.</p> <p>22 A. No. That's not what I said.</p> <p>23 Q. Oh, okay.</p> <p>24 A. No. I --</p> <p>25 Q. I misunderstood.</p>
<p style="text-align: right;">175</p> <p>1 A. Yeah.</p> <p>2 Q. -- is because you didn't -- in your infrared</p> <p>3 pictures, you -- or your photos, you say, "infrared</p> <p>4 photo showing anomaly."</p> <p>5 A. Right.</p> <p>6 Q. You don't say, "showing moisture."</p> <p>7 A. It doesn't show moisture.</p> <p>8 Q. Okay. So -- Okay. How does that work?</p> <p>9 A. That would be -- Somebody's out there telling</p> <p>10 you that they can find moisture or mold or anything like</p> <p>11 that with an infrared camera, they don't know what</p> <p>12 they're talking about.</p> <p>13 Number 1 -- Number 1, to use an infrared</p> <p>14 camera, you need to know how the building is</p> <p>15 constructed. If I'm going to shoot the infrared camera</p> <p>16 on that wall behind her -- All right -- I've got to</p> <p>17 know, darn well, there's probably 16-inch studs on</p> <p>18 center. I may find an old header in there from a door.</p> <p>19 I need to know why -- what that is. I need to know that</p> <p>20 it's a header that I'm looking at.</p> <p>21 So you know all you need to know how the</p> <p>22 building's constructed, so you know what you're looking</p> <p>23 at. Not unlike a doctor looking at an x-ray.</p> <p>24 Then you need to be able to understand</p> <p>25 what anomaly -- what anomalies look like. What should I</p>	<p style="text-align: right;">177</p> <p>1 A. I indicated that -- I indicated that I found</p> <p>2 numerous anomaly locations on the roof.</p> <p>3 Q. Okay.</p> <p>4 A. Numerous anomaly locations. Then I took a</p> <p>5 Tramex moisture meter at those anomaly locations, after</p> <p>6 I had calibrated for dry.</p> <p>7 Q. Okay.</p> <p>8 A. And moved it to the -- I mean, I've got the</p> <p>9 infrared camera running. I set it on the roof, and I</p> <p>10 move -- move the infrared -- move the meter to an</p> <p>11 anomaly location.</p> <p>12 Q. Right.</p> <p>13 A. The meter pegs out at eighty to a hundred</p> <p>14 percent. I have pictures of the infrared and the meter</p> <p>15 in the infrared picture. That's what I was doing to</p> <p>16 moisture map.</p> <p>17 Q. Okay. So --</p> <p>18 A. So I'm using two points of correlation.</p> <p>19 Q. Okay. So when you're using -- Okay. So you're</p> <p>20 using infrared and Tramex. And -- And together --</p> <p>21 A. And I also put the infrared on the Tramex at</p> <p>22 the locations that I was hitting 18 to 20 percent. And</p> <p>23 guess what? There's no anomaly.</p> <p>24 Q. Okay. Okay. All right. Is there, like, a --</p> <p>25 a standard methodology or procedure, you know, resource</p>

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<p style="text-align: right;">194</p> <p>1 and placed a bunch of orange cones on things that she</p> <p>2 thought was hail damage, and then they relied on that to</p> <p>3 formulate their opinion, that would be a terrible thing</p> <p>4 to do.</p> <p>5 Q. (BY MR. PFANSTIEL) But -- But, I guess, I'm --</p> <p>6 I guess what I'm getting at is, what's -- what's the</p> <p>7 basis of your opinion that he did not perform an</p> <p>8 investigation other than looking at the orange cones?</p> <p>9 A. There's no other data, in his report,</p> <p>10 indicating that he did. There's nothing else, in his</p> <p>11 report, indicating that he did anything other than that.</p> <p>12 Q. Oh. So you don't think that he inspected the</p> <p>13 roof?</p> <p>14 A. I think he inspected the roof. There's no</p> <p>15 indication that he gathered any additional data</p> <p>16 regarding damage to the roof, other than where the cones</p> <p>17 were placed.</p> <p>18 Q. Okay.</p> <p>19 A. Yeah.</p> <p>20 Q. Because he didn't find hail damage.</p> <p>21 A. Well ...</p> <p>22 Q. Okay. All right. So what you're saying, if</p> <p>23 all he did was just go to the orange cones, that</p> <p>24 would -- he wouldn't have been doing his job.</p> <p>25 A. Correct.</p>	<p style="text-align: right;">196</p> <p>1 as to when the leaking started.</p> <p>2 A. Yes, from the investigation; and, also, you</p> <p>3 know, had the alligator cracking been the cause of the</p> <p>4 damages, I already testified the damages would be more</p> <p>5 catastrophic than this. And, also, the infrared, and</p> <p>6 even the moisture readings, would have been much less</p> <p>7 localized as -- as we took -- it would have been more</p> <p>8 widespread.</p> <p>9 Q. Okay.</p> <p>10 A. Yeah.</p> <p>11 Q. The -- You're assuming, though, that the</p> <p>12 alligator cracking would all deteriorate and -- and --</p> <p>13 at the same -- at the same --</p> <p>14 MR. PFANSTIEL: Strike that.</p> <p>15 Q. (BY MR. PFANSTIEL) And -- And you did find</p> <p>16 blisters on the roof?</p> <p>17 A. I found one blister, and that was up on the</p> <p>18 parapet wall; and I indicated that it was a bubble on</p> <p>19 that, that it had been indented by hail. I did not find</p> <p>20 any other blistering.</p> <p>21 Q. Okay. Because 3.11, you say, "Blisters exist</p> <p>22 on the roof."</p> <p>23 A. Hmm. Probably a misprint.</p> <p>24 Q. Okay. So your testimony today is there's only</p> <p>25 one blister.</p>
<p style="text-align: right;">195</p> <p>1 Q. Okay.</p> <p>2 A. What are the odds we could take a break for</p> <p>3 bathroom here?</p> <p>4 Q. Sure. That's fine.</p> <p>5 MR. McCLENNY: Absolutely.</p> <p>6 (Recess from 1:36 p.m. to 1:50 p.m.)</p> <p>7 MR. PFANSTIEL: Can we go back on?</p> <p>8 MR. McCLENNY: Sure.</p> <p>9 Q. (BY MR. PFANSTIEL) All right. Mr. Irmiter --</p> <p>10 A. Yes.</p> <p>11 Q. -- is it your testimony today that the moisture</p> <p>12 you found in the roof was caused by hail fractures to</p> <p>13 the roof?</p> <p>14 A. The hail fractures created the mechanism for</p> <p>15 the water entry.</p> <p>16 Q. Okay. Is it your testimony that the hail</p> <p>17 fractures are the sole cause of the moisture in the roof</p> <p>18 membrane?</p> <p>19 A. Yes.</p> <p>20 Q. And that the alligator cracking had no -- was</p> <p>21 not a causal reason for that.</p> <p>22 A. Yes.</p> <p>23 Q. And part of that opinion is based on your</p> <p>24 observations on the site, and part of that is because of</p> <p>25 the -- the facts as related to you by the building owner</p>	<p style="text-align: right;">197</p> <p>1 A. Oh, okay. I have to put this in context.</p> <p>2 (Looking at report.) Yeah. What -- What I'm referring</p> <p>3 to here is we did not see blisters in the way that</p> <p>4 Vertex is describing what a blister is. That would be a</p> <p>5 different phenomena. A blister would be indicative of</p> <p>6 improper mix of the material, improper installation or</p> <p>7 installing over wet materials; and it evidences itself</p> <p>8 more as a bubble, a lifting up, that creates a blister.</p> <p>9 That's what I'm pointing is.</p> <p>10 So the blisters that we're seeing are --</p> <p>11 What I'm calling a blister and what he's calling a</p> <p>12 blister are probably two different things. There are</p> <p>13 indications of delaminated elastomeric coating that has</p> <p>14 blistered. That's a coating on top, and that's most</p> <p>15 likely indicative to poor surface prep; putting that</p> <p>16 material over dirty --</p> <p>17 Q. Right.</p> <p>18 A. -- dirty membrane. That's, really, what's that</p> <p>19 doing. And that -- So it's two different things.</p> <p>20 Q. Okay. So --</p> <p>21 A. Yeah.</p> <p>22 Q. But as I understand your testimony today,</p> <p>23 effectively, you were able to identify moisture in the</p> <p>24 roof by the Tramex and infrared technologies; and then</p> <p>25 you also found some fractures, and you did a -- you did</p>

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